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(54) CUTTER FOR MIRROR SURFACE

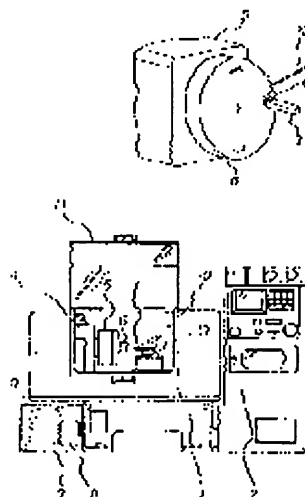
(57) Abstract:

PURPOSE: To enable the surface of a material such as steel to be cut easily finished to a mirror surface in a cutting process using a diamond tool by providing a means for removing oxygen staying in a cutting point or removing oxygen replaceable with inactive gas, and a moisture removing means for removing moisture adsorbed to the material.

CONSTITUTION: When a cutter for a mirror turns on, a vacuum unit 7 operates so as to make a chamber portion 10 vacuum and maintain it at a set vacuum degree, thereby positioning a bite holder 13 in a cutting start point. And then, a laser irradiating gun 12 operates so that both laser irradiation and the supply of N₂ gas are applied to the cutting start point of an article 6 to be cut, and, a chuck 5 rotates so that the diamond tool 3 states the cutting of the article 6 to be cut. Upon the termination of a predetermined cutting, the chuck 5 stops to rotate so as to obtain the cut article finished to

a mirror surface. Therefore, the removals of oxygen in the atmosphere and moisture adsorbed to the article to be cut can prevent wear of the tool so as to obtain a preferable mirror surface.

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